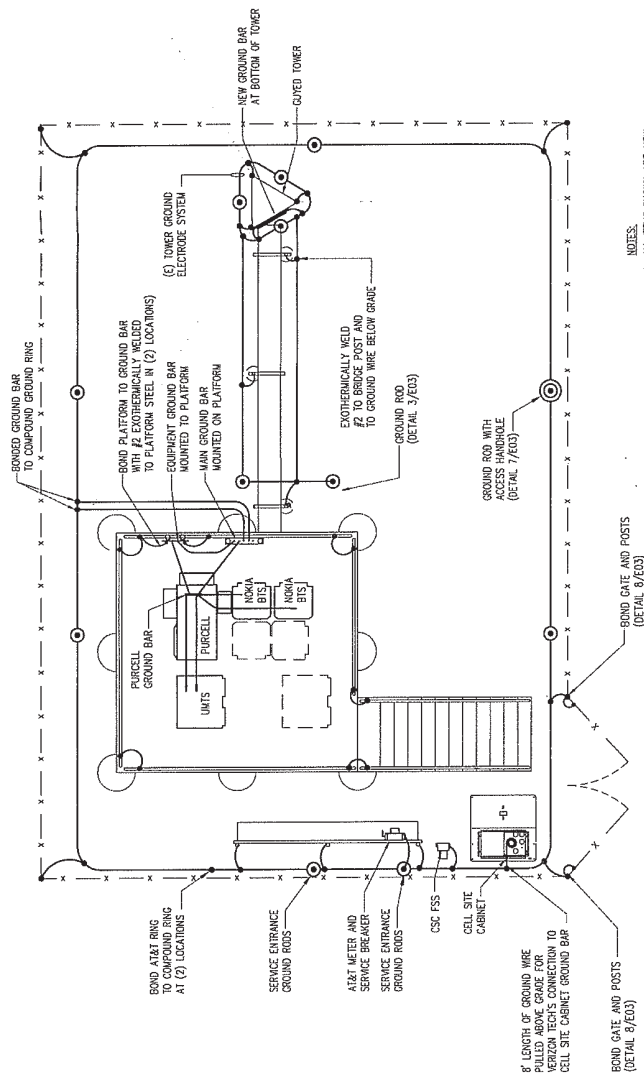


PANEL - PPC

120/240 VOLTS 1 PHASE 3 WIRE 200 AMP MCB											
LOAD DESCRIPTION	VA	R	A	B	T	C	K	R	C	K	VA
CSP1 - CRT RECEPT	180	20	1	1705	2	30	1553	CSP1 - RECT. FEED 7 SHELF 2			
CSP2 - AIR COND. RECEPT	1095	3	2620	4	10	5253	CSP2 - RECT. FEED 8 SHELF 2				
CSP3 - RECT. FEED 1 SHELF 1	1525	2	3050	6	30	1525	CSP3 - RECT. FEED 9 SHELF 2				
CSP4 - RECT. FEED 2 SHELF 1	1525	2	3050	10	30	1525	CSP4 - RECT. FEED 3 SHELF 1				
CSP5 - RECT. FEED 2 SHELF 2	1525	30	11	2245	12	20	770	CSP5 - RECT. FEED 4 SHELF 2			
CSP6 - RECT. FEED 3 SHELF 1	1525	30	13	2365	14	20	840	CSP6 - RECT. FEED 5 SHELF 1			
CSP7 - RECT. FEED 3 SHELF 2	1525	30	15	2485	16	20	840	CSP7 - RECT. FEED 6 SHELF 2			
CSP8 - RECT. FEED 4 SHELF 1	1525	30	17	2725	18	15	750	CSP8 - RECT. FEED 7 SHELF 1			
CSP9 - RECT. FEED 4 SHELF 2	1525	30	19	2745	20	15	750	CSP9 - RECT. FEED 8 SHELF 2			
CSP10 - RECT. FEED 5 SHELF 2	1525	30	21	2775	22	15	750	CSP10 - RECT. FEED 9 SHELF 2			
CSP11 - RECT. FEED 6 SHELF 2	1525	30	23	2795	24	15	750	CSP11 - RECT. FEED 10 SHELF 2			
CSP12 - RECT. FEED 7 SHELF 2	1525	30	25	2835	26	20	840	CSP12 - RECT. FEED 11 SHELF 2			
CSP13 - RECT. FEED 8 SHELF 2	1525	30	27	2855	28	20	840	CSP13 - RECT. FEED 12 SHELF 2			
CSP14 - RECT. FEED 9 SHELF 2	1525	30	29	2875	30	15	750	CSP14 - RECT. FEED 13 SHELF 2			
CSP15 - RECT. FEED 10 SHELF 2	1525	30	31	2895	32	15	750	CSP15 - RECT. FEED 14 SHELF 2			
CSP16 - RECT. FEED 11 SHELF 2	1525	30	33	2915	34	15	750	CSP16 - RECT. FEED 15 SHELF 2			
CSP17 - RECT. FEED 12 SHELF 2	1525	30	35	2935	36	20	840	CSP17 - RECT. FEED 16 SHELF 2			
CSP18 - RECT. FEED 13 SHELF 2	1525	30	37	2955	38	20	840	CSP18 - RECT. FEED 17 SHELF 2			
CSP19 - RECT. FEED 14 SHELF 2	1525	30	39	2975	40	15	750	CSP19 - RECT. FEED 18 SHELF 2			
CSP20 - RECT. FEED 15 SHELF 2	1525	30	41	2995	42	15	750	CSP20 - RECT. FEED 19 SHELF 2			
CSP21 - RECT. FEED 16 SHELF 2	1525	30	43	3015	44	20	840	CSP21 - RECT. FEED 20 SHELF 2			
CSP22 - RECT. FEED 17 SHELF 2	1525	30	45	3035	46	20	840	CSP22 - RECT. FEED 21 SHELF 2			
CSP23 - RECT. FEED 18 SHELF 2	1525	30	47	3055	48	20	840	CSP23 - RECT. FEED 22 SHELF 2			
CSP24 - RECT. FEED 19 SHELF 2	1525	30	49	3075	50	15	750	CSP24 - RECT. FEED 23 SHELF 2			
CSP25 - RECT. FEED 20 SHELF 2	1525	30	51	3095	52	15	750	CSP25 - RECT. FEED 24 SHELF 2			
CSP26 - RECT. FEED 21 SHELF 2	1525	30	53	3115	54	15	750	CSP26 - RECT. FEED 25 SHELF 2			
CSP27 - RECT. FEED 22 SHELF 2	1525	30	55	3135	56	20	840	CSP27 - RECT. FEED 26 SHELF 2			
CSP28 - RECT. FEED 23 SHELF 2	1525	30	57	3155	58	20	840	CSP28 - RECT. FEED 27 SHELF 2			
CSP29 - RECT. FEED 24 SHELF 2	1525	30	59	3175	60	15	750	CSP29 - RECT. FEED 28 SHELF 2			
CSP30 - RECT. FEED 25 SHELF 2	1525	30	61	3195	62	15	750	CSP30 - RECT. FEED 29 SHELF 2			
CSP31 - RECT. FEED 26 SHELF 2	1525	30	63	3215	64	20	840	CSP31 - RECT. FEED 30 SHELF 2			
CSP32 - RECT. FEED 27 SHELF 2	1525	30	65	3235	66	20	840	CSP32 - RECT. FEED 31 SHELF 2			
CSP33 - RECT. FEED 28 SHELF 2	1525	30	67	3255	68	20	840	CSP33 - RECT. FEED 32 SHELF 2			
CSP34 - RECT. FEED 29 SHELF 2	1525	30	69	3275	70	15	750	CSP34 - RECT. FEED 33 SHELF 2			
CSP35 - RECT. FEED 30 SHELF 2	1525	30	71	3295	72	15	750	CSP35 - RECT. FEED 34 SHELF 2			
CSP36 - RECT. FEED 31 SHELF 2	1525	30	73	3315	74	15	750	CSP36 - RECT. FEED 35 SHELF 2			
CSP37 - RECT. FEED 32 SHELF 2	1525	30	75	3335	76	20	840	CSP37 - RECT. FEED 36 SHELF 2			
CSP38 - RECT. FEED 33 SHELF 2	1525	30	77	3355	78	20	840	CSP38 - RECT. FEED 37 SHELF 2			
CSP39 - RECT. FEED 34 SHELF 2	1525	30	79	3375	80	15	750	CSP39 - RECT. FEED 38 SHELF 2			
CSP40 - RECT. FEED 35 SHELF 2	1525	30	81	3395	82	15	750	CSP40 - RECT. FEED 39 SHELF 2			
CSP41 - RECT. FEED 36 SHELF 2	1525	30	83	3415	84	20	840	CSP41 - RECT. FEED 40 SHELF 2			
CSP42 - RECT. FEED 37 SHELF 2	1525	30	85	3435	86	20	840	CSP42 - RECT. FEED 41 SHELF 2			
CSP43 - RECT. FEED 38 SHELF 2	1525	30	87	3455	88	20	840	CSP43 - RECT. FEED 42 SHELF 2			
CSP44 - RECT. FEED 39 SHELF 2	1525	30	89	3475	90	15	750	CSP44 - RECT. FEED 43 SHELF 2			
CSP45 - RECT. FEED 40 SHELF 2	1525	30	91	3495	92	15	750	CSP45 - RECT. FEED 44 SHELF 2			
CSP46 - RECT. FEED 41 SHELF 2	1525	30	93	3515	94	20	840	CSP46 - RECT. FEED 45 SHELF 2			
CSP47 - RECT. FEED 42 SHELF 2	1525	30	95	3535	96	20	840	CSP47 - RECT. FEED 46 SHELF 2			
CSP48 - RECT. FEED 43 SHELF 2	1525	30	97	3555	98	20	840	CSP48 - RECT. FEED 47 SHELF 2			
CSP49 - RECT. FEED 44 SHELF 2	1525	30	99	3575	100	15	750	CSP49 - RECT. FEED 48 SHELF 2			
CSP50 - RECT. FEED 45 SHELF 2	1525	30	101	3595	102	15	750	CSP50 - RECT. FEED 49 SHELF 2			
CSP51 - RECT. FEED 46 SHELF 2	1525	30	103	3615	104	20	840	CSP51 - RECT. FEED 50 SHELF 2			
CSP52 - RECT. FEED 47 SHELF 2	1525	30	105	3635	106	20	840	CSP52 - RECT. FEED 51 SHELF 2			
CSP53 - RECT. FEED 48 SHELF 2	1525	30	107	3655	108	20	840	CSP53 - RECT. FEED 52 SHELF 2			
CSP54 - RECT. FEED 49 SHELF 2	1525	30	109	3675	110	15	750	CSP54 - RECT. FEED 53 SHELF 2			
CSP55 - RECT. FEED 50 SHELF 2	1525	30	111	3695	112	15	750	CSP55 - RECT. FEED 54 SHELF 2			
CSP56 - RECT. FEED 51 SHELF 2	1525	30	113	3715	114	20	840	CSP56 - RECT. FEED 55 SHELF 2			
CSP57 - RECT. FEED 52 SHELF 2	1525	30	115	3735	116	20	840	CSP57 - RECT. FEED 56 SHELF 2			
CSP58 - RECT. FEED 53 SHELF 2	1525	30	117	3755	118	20	840	CSP58 - RECT. FEED 57 SHELF 2			
CSP59 - RECT. FEED 54 SHELF 2	1525	30	119	3775	120	15	750	CSP59 - RECT. FEED 58 SHELF 2			
CSP60 - RECT. FEED 55 SHELF 2	1525	30	121	3795	122	15	750	CSP60 - RECT. FEED 59 SHELF 2			
CSP61 - RECT. FEED 56 SHELF 2	1525	30	123	3815	124	20	840	CSP61 - RECT. FEED 60 SHELF 2			
CSP62 - RECT. FEED 57 SHELF 2	1525	30	125	3835	126	20	840	CSP62 - RECT. FEED 61 SHELF 2			
CSP63 - RECT. FEED 58 SHELF 2	1525	30	127	3855	128	20	840	CSP63 - RECT. FEED 62 SHELF 2			
CSP64 - RECT. FEED 59 SHELF 2	1525	30	129	3875	130	15	750	CSP64 - RECT. FEED 63 SHELF 2			
CSP65 - RECT. FEED 60 SHELF 2	1525	30	131	3895	132	15	750	CSP65 - RECT. FEED 64 SHELF 2			
CSP66 - RECT. FEED 61 SHELF 2	1525	30	133	3915	134	20	840	CSP66 - RECT. FEED 65 SHELF 2			
CSP67 - RECT. FEED 62 SHELF 2	1525	30	135	3935	136	20	840	CSP67 - RECT. FEED 66 SHELF 2			
CSP68 - RECT. FEED 63 SHELF 2	1525	30	137	3955	138	20	840	CSP68 - RECT. FEED 67 SHELF 2			
CSP69 - RECT. FEED 64 SHELF 2	1525	30	139	3975	140	15	750	CSP69 - RECT. FEED 68 SHELF 2			
CSP70 - RECT. FEED 65 SHELF 2	1525	30	141	3995	142	15	750	CSP70 - RECT. FEED 69 SHELF 2			
CSP71 - RECT. FEED 66 SHELF 2	1525	30	143	4015	144	20	840	CSP71 - RECT. FEED 70 SHELF 2			
CSP72 - RECT. FEED 67 SHELF 2	1525	30	145	4035	146	20	840	CSP72 - RECT. FEED 71 SHELF 2			
CSP73 - RECT. FEED 68 SHELF 2	1525	30	147	4055	148	20	840	CSP73 - RECT. FEED 72 SHELF 2			
CSP74 - RECT. FEED 69 SHELF 2	1525	30	149	4075	150	15	750	CSP74 - RECT. FEED 73 SHELF 2			
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CSP76 - RECT. FEED 71 SHELF 2	1525	30	153	4115	154	20	840	CSP76 - RECT. FEED 75 SHELF 2			
CSP77 - RECT. FEED 72 SHELF 2	1525	30	155	4135	156	20	840	CSP77 - RECT. FEED 76 SHELF 2			
CSP78 - RECT. FEED 73 SHELF 2	1525	30	157	4155	158	20	840	CSP78 - RECT. FEED 77 SHELF 2			
CSP79 - RECT. FEED 74 SHELF 2	1525	30	159	4175	160	15	750	CSP79 - RECT. FEED 78 SHELF 2			
CSP80 - RECT. FEED 75 SHELF 2	1525	30	161	4195	162	15	750	CSP80 - RECT. FEED 79 SHELF 2			
CSP81 - RECT. FEED 76 SHELF 2	1525	30	163	4215	164	20	840	CSP81 - RECT. FEED 80 SHELF 2			
CSP82 - RECT. FEED 77 SHELF 2	1525	30	165	4235	166	20	840	CSP82 - RECT. FEED 81 SHELF 2			
CSP83 - RECT. FEED 78 SHELF 2	1525	30	167	4255	168	20	840	CSP83 - RECT. FEED 82 SHELF 2			
CSP84 - RECT. FEED 79 SHELF 2	1525	30	169	4275	170	15	750	CSP84 - RECT. FEED 83 SHELF 2			
CSP85 - RECT. FEED 80 SHELF 2	1525	30	171	4295	172	15	750	CSP85 - RECT. FEED 84 SHELF 2			
CSP86 - RECT. FEED 81 SHELF 2	1525	30	173	4315	174	20	840	CSP86 - RECT. FEED 85 SHELF 2			
CSP87 - RECT. FEED 82 SHELF 2	1525	30	175	4335	176	20	840	CSP87 - RECT. FEED 86 SHELF 2			
CSP88 - RECT. FEED 83 SHELF 2	1525	30	177	4355	178	20	840	CSP88 - RECT. FEED 87 SHELF 2			
CSP89 - RECT. FEED 84 SHELF 2	1525	30	179	4375	180	15	750	CSP89 - RECT. FEED 88 SHELF 2			
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CSP92 - RECT. FEED 87 SHELF 2	1525	30	185	4435	186	20	840	CSP92 - RECT. FEED 91 SHELF 2			
CSP93 - RECT. FEED 88 SHELF 2	1525	30	187	4455	188	20	840	CSP93 - RECT. FEED 92 SHELF 2			
CSP94 - RECT. FEED 89 SHELF 2	1525	30	189	4475	190	15	750	CSP94 - RECT. FEED 93 SHELF 2			
CSP95 - RECT. FEED 90 SHELF 2	1525	30	191	4495	192	15	750	CSP95 - RECT. FEED 94 SHELF 2			
CSP96 - RECT. FEED 91 SHELF 2	1525	30	193	4515	194	20	840	CSP96 - RECT. FEED 95 SHELF 2			
CSP97 - RECT. FEED 92 SHELF 2	1525	30	195	4535	196	20	840	CSP97 - RECT. FEED 96 SHELF 2			
CSP98 - RECT. FEED 93 SHELF 2	1525	30	197	4555	198	20	840	CSP98 - RECT. FEED 97 SHELF 2			
CSP99 - RECT. FEED 94 SHELF 2	1525	30	199	4575	200	15	750	CSP99 - RECT. FEED 98 SHELF 2			
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CSP103 - RECT. FEED 98 SHELF 2	1525	30	207	4655	208	20	840	CSP103 - RECT. FEED 102 SHELF 2			
CSP104 - RECT. FEED 99 SHELF 2	1525	30	209	4675	210	15	750	CSP104 - RECT. FEED 103 SHELF 2			
CSP105 - RECT. FEED 100 SHELF 2	1525	30	211	4695	212	15	750	CSP105 - RECT. FEED 104 SHELF 2			
CSP106 - RECT. FEED 101 SHELF 2	1525	30	213	4715	214	20	840	CSP106 - RECT. FEED 105 SHELF 2			
CSP107 - RECT. FEED 102 SHELF 2	1525	30	215	4735	216	20	840	CSP107 - RECT. FEED 106 SHELF 2			
CSP108 - RECT. FEED 103 SHELF 2	1525	30	217	4755	218	20	840	CSP108 - RECT. FEED 107 SHELF 2			
CSP109 - RECT. FEED 104 SHELF 2											



GROUNDING NOTES

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AIR POWER) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100-1996) ON ALL GROUNDING SYSTEMS. THE RESULTS SHALL BE SUBMITTED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. PROPERLY SEQUENCE GROUNDING AND UNDERGROUND CONDUIT INSTALLATION TO THE POINT OF ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE CONDUIT WITH CONDUIT BONDING COMPOUND. ALL CONDUIT SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC.
5. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
6. STRANDED GROUND WIRES SHALL HAVE GREEN 600 VOLT THWN INSULATION.
7. ALL GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
8. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
9. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
10. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
11. ALL GROUND CONNECTIONS ABOVE GRADE SHALL BE FORMED USING HIGH PRESSURE COPPER C-TAPS.
12. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
13. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
14. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE APPLIED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
15. ALL GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
16. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
17. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TINNED COPPER GROUND CONDUCTOR.
18. DO NOT ROUTE GROUNDING CONDUCTORS THROUGH METALLIC OBJECTS THAT FORM PART OF THE CONDUCTING SYSTEM. IF SUCH OBJECTS ARE PRESENT, THEY MUST BE GROUNDED WIRE SHALL BE GROUNDED TO THE GROUNDING SYSTEM. DO NOT EFFECT.

COMPOUND LAYOUT - GROUNDING

SCALE: 1/8"=1'-0"



- PLATFORM GROUNDING NOTES**
1. — INDICATES A MECHANICAL (LUG) BONDING CONNECTION
 2. ALL WIRES SHOWN THIS PLAN SHALL BE GREEN-INSULATED THIN STRANDED COPPER
 3. BOND METAL ENCLOSURES TO GROUND BAR WITH #2
 4. ALL WIRES CONNECTED TO EQUIPMENT GROUND BAR SHALL BE #2
 5. FASTEN WIRE WITH NYLON WIRE-SUPPORT STRAPS. DO NOT USE IIF WRAPS.

[illegible]

GROUNDING PLANS AND NOTES

JOB NO.	DRAWING NUMBER
	E02



7150 STANDARD DRIVE
HANOVER, MD 21075

BLACKWATER
MD1785

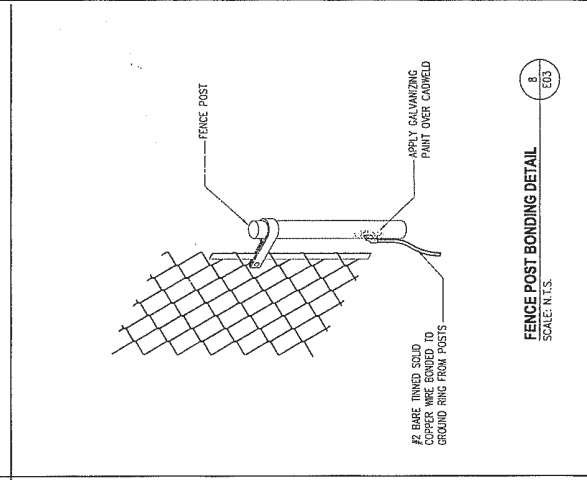
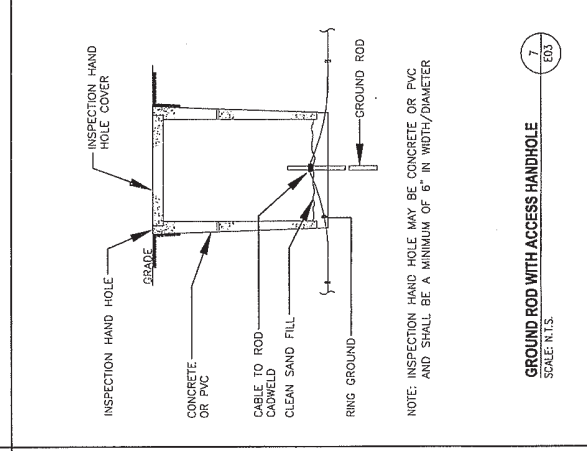
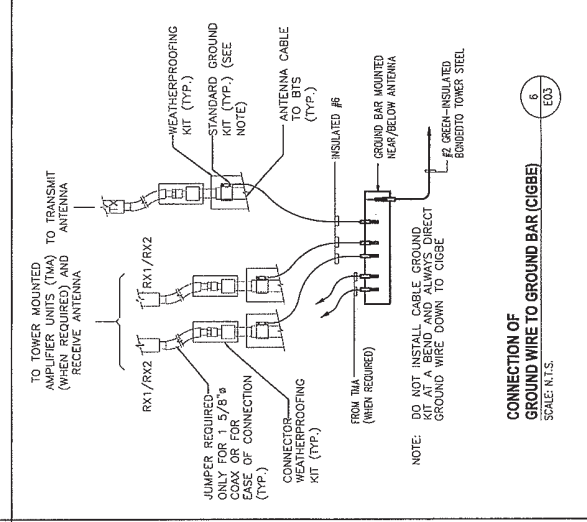
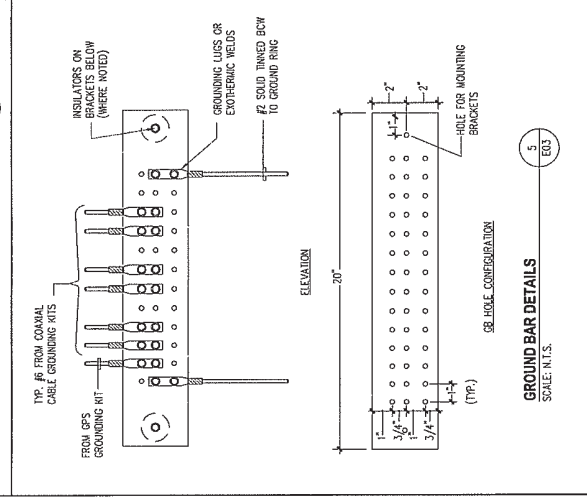
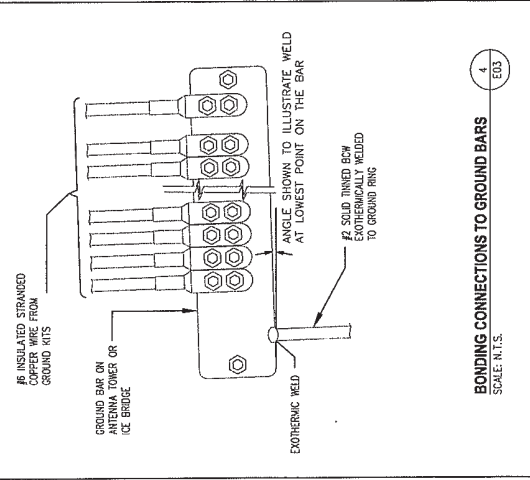
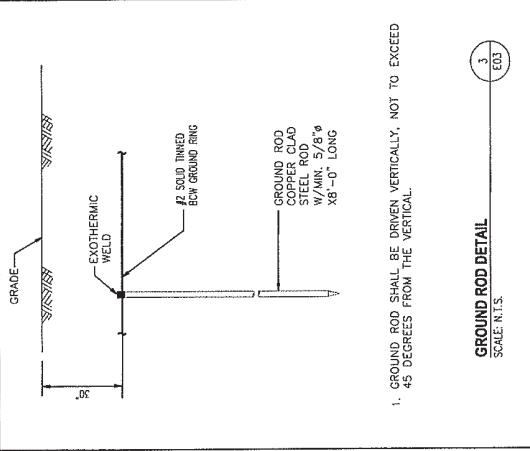
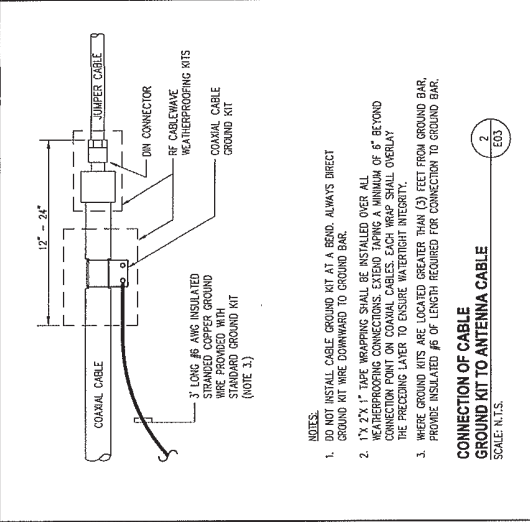
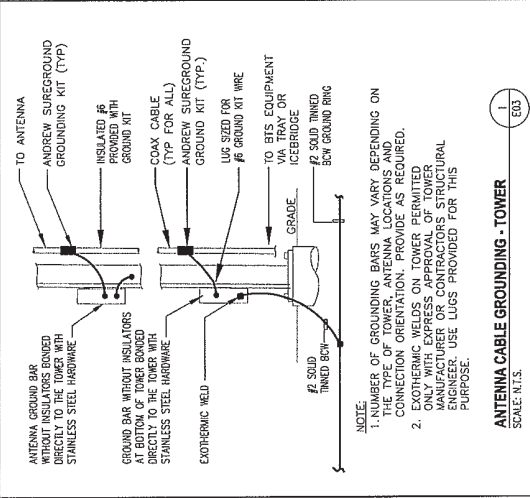
3445 GOLDEN HILL RD.
CHURCH CREEK, MD 21622



1575 Eye Street, N.W. Suite 350
WASHINGTON, D.C. 20005
PHONE: (202)408-0960
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PROJECT NUMBER:

072-031



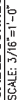
entrex
communication services, Inc.
1500 5th Street, N.E., Suite 350
Atlanta, Georgia 30309
PHONE: (202) 468-0880
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BLACKWATER
MD1785
3448 GOLDEN HILL RD.
CHURCH CREEK, MD 21622

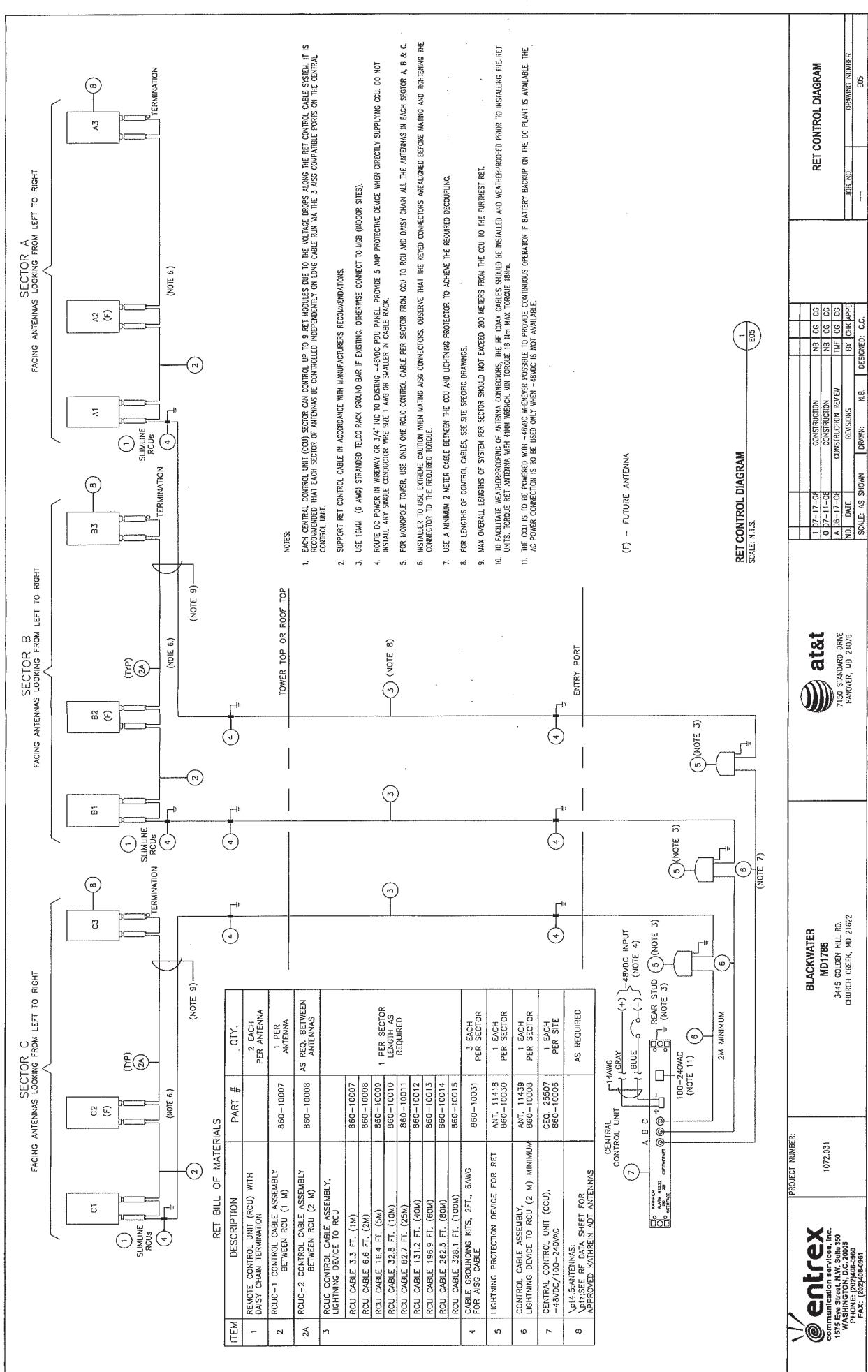
at&t
7150 STANDARD DRIVE
HANOVER, MD 21076

NO.	DATE	AS SHOWN	DESIGN	REVISIONS	BY	CHK	APP	DESIGNED	C.C.
1	10-17-08			CONSTRUCTION	NB	CC	CC		
2	11-11-08			CONSTRUCTION	NB	CC	CC		
3	12-17-08			CONSTRUCTION REVIEW	NB	CC	CC		
4				REVISIONS	BT	CC	CC		
SCALE: AS SHOWN									
PROJECT NUMBER: 1072.031									
DRAWING NUMBER: 1072.031									
JOB NO. ---									
E.D.S.									

GROUNDING DETAILS - 1



JOB NO.	DRAWING NUMBER
	E04



entrex
communication services, inc.
15000 15th Avenue, Suite 200
Washington, D.C. 20005
PHONE: (202) 440-0990
FAX: (202) 440-0951

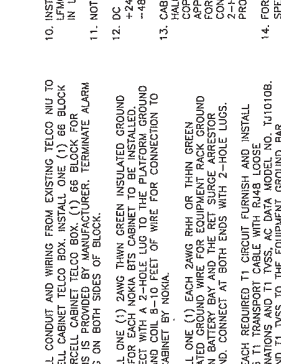
PROJECT NUMBER
1072.031

BLACKWATER
MD1785
3445 GOLDEN HILL RD.
CHURCH CREEK, MD 21622

at&t
7130 STANDARD DRIVE
HANOVER, MD 21076

1	10-17-06	CONSTRUCTION	NB	CG	CG
2	10-17-06	CONSTRUCTION	NB	CG	CG
3	10-17-06	CONSTRUCTION REVIEW	NB	CG	CG
4	10-17-06	REVISIONS	BY	CHK	PPE
NO.	DATE	AS SHOWN	DRAWN	N.B.	DESIGNED: C.E.

RET CONTROL DIAGRAM
JOB NO. ---
DRAWING NUMBER 005



- [illegible]

LEGEND

(E) = EXISTING	ED = TO BE DETERMINED
(N) = NEW	(F) = FUTURE
EXISTING CONNECTIONS / EQUIP.	_____
NEW CONNECTIONS / EQUIP.	_____
EXISTING GROUNDING	_____
NEW GROUNDING	_____
EXISTING CONNECTIONS, TABLE, REPAIR EQUIPMENT	_____
TO BE REPAIRED EQUIPMENT	_____ X

SITE SPECIFIC DATA		QTY
(NEW)	DESCRIPTION	
	NOKIA GSM CABINETS	2
	250A, 24V DC BREAKER(S) FOR GSM BITS	2
	RECIPIERS TO BE ADDED	6
	CONVERTERS, 24V/48V DC	2
	T1 LINES FOR GSM	2
	T1 LINES FOR UMITS	2
	LUCENT UMITS CABINET	1
	150A, 24V DC BREAKER FOR UMITS BITS	1

GSM SINGLE-LINE DIAGRAM

SCALE: N T S

SINGLE-LINE DIAGRAM FOR OUTDOOR NOKIA GSM CABINETS W/ PURCELL POWER CABINET

BECHTEL DETAIL NO.312PA-8WA

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PHONE: (202)408-0960
FAX: (202)408-0361

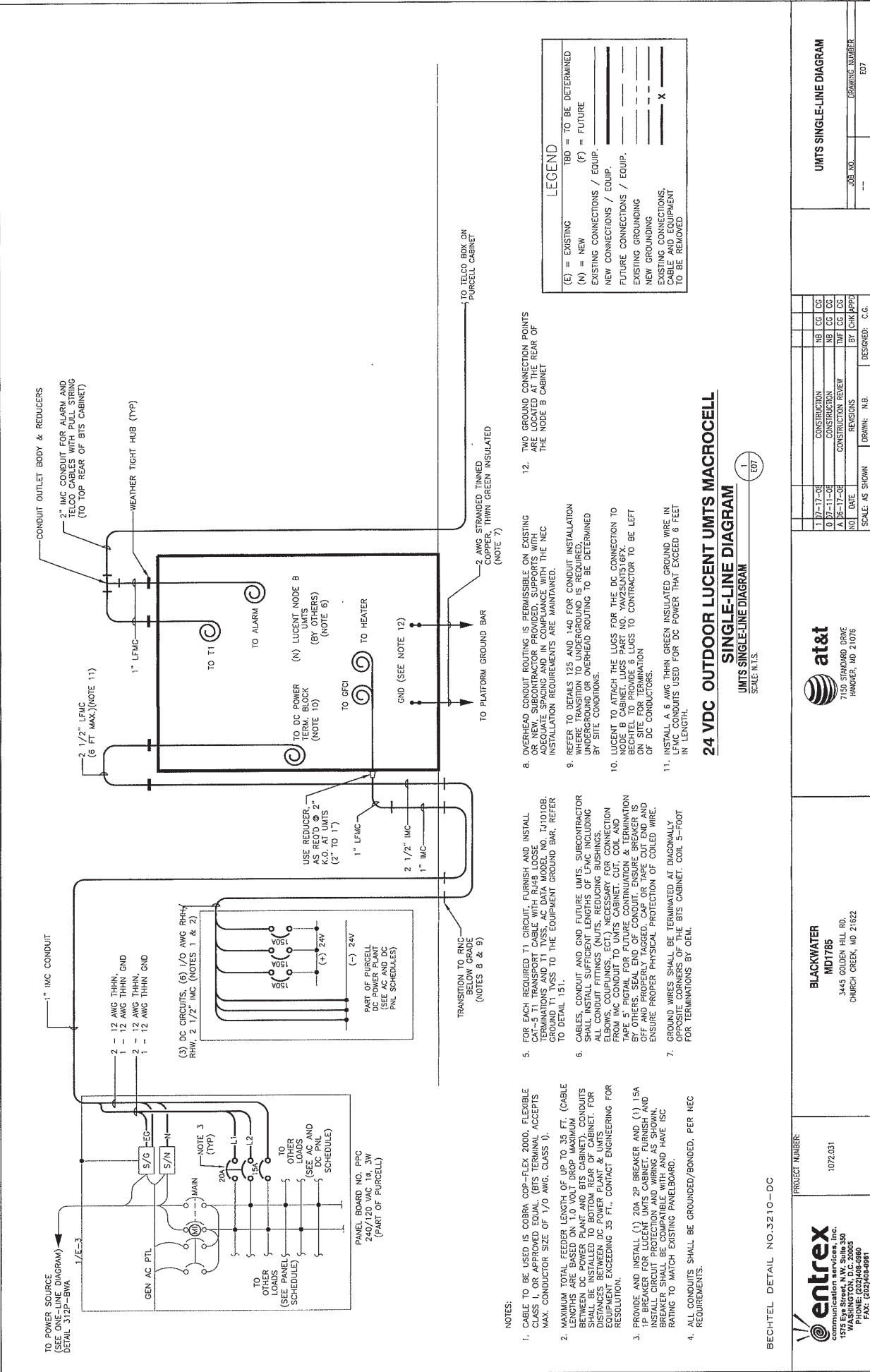
BLACKWATER
MD1785
3445 GOLDEN HILL RD.
CHURCH CREEK, MD 21622

[illegible]

3445 GOLDEN HILL RD.
CHURCH: CREEK, MD 21622

GSM SINGLE-LINE DIAGRAM

JOB NO.	DRAWING
---------	---------



LEGEND	
(E) = EXISTING	TBD = TO BE DETERMINED
(N) = NEW	(F) = FUTURE
EXISTING CONNECTIONS / EQUIP.	---
NEW CONNECTIONS / EQUIP.	---
FUTURE CONNECTIONS / EQUIP.	---
EXISTING GROUNDING	---
NEW GROUNDING	---
EXISTING CONNECTIONS, CABLE AND EQUIPMENT TO BE REMOVED	X

24 VDC OUTDOOR LUCENT UMTS MACROCELL
SINGLE-LINE DIAGRAM
UMTS SINGLE-LINE DIAGRAM
SCALE: N.T.S.

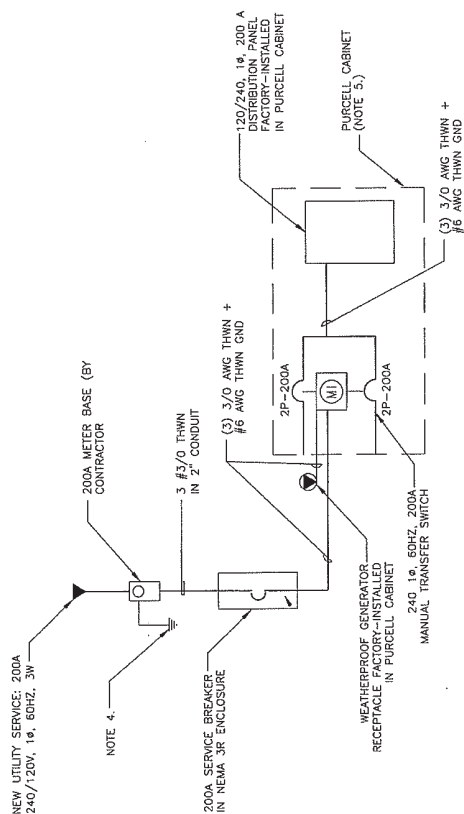
entrex
communication services, inc.
1975 Eye Street, N.W., Suite 350
Washington, D.C. 20004-2505
PHONE: (202) 462-2800
FAX: (202) 462-2881

PROJECT NUMBER:
1072.031

BLACKWATER
MD1785
3445 GOLDEN HILL RD.
CHURCH CREEK, MD 21622

SCALE: AS SHOWN
DRAWN: N.B.
DESIGNED: C.C.
1
E07

UMTS SINGLE-LINE DIAGRAM
JOB NO. ---
DRAWING NUMBER
E07

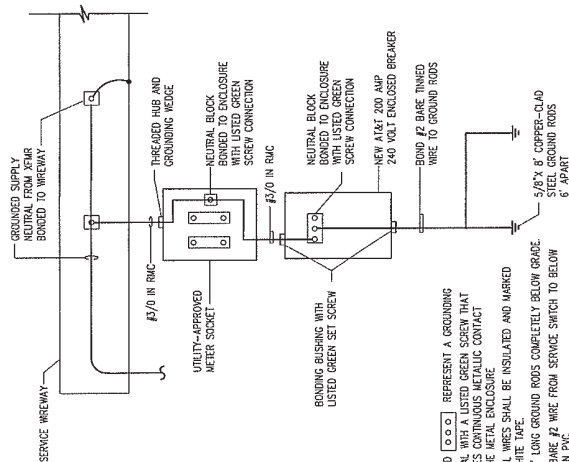


NOTES:



1. SUBCONTRACTOR SHALL PROVIDE 200AMP, SINGLE PHASE, 120/240 VAC, 60HZ SERVICE FOR SITE.
2. SUBCONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES TO START CONSTRUCTION POWER AND TELEPHONE CONDUIT SHALL BE PROVIDED AND INSTALLED PER UTILITY REQUIREMENTS.
3. SUBCONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE TO ALL BUILDINGS AND SHALL BE RESPONSIBLE FOR THE AVAILABLE FAULT CURRENT FROM THE POWER UTILITY.
4. REFER TO DIAGRAM 2/E08 FOR SERVICE GROUNDING REQUIRED PER N.E.C.
5. FOR COMPLETE INTERNAL WIRING AND ARRANGEMENT REFER TO DRAWINGS PROVIDED BY PURCELL AND DRAWINGS 1/E06S AND 1/E07.

POWER DIAGRAM

SCALE: N.T.S.



NOTES:

1.  AND  REPRESENT A GROUNDING TERMINAL WITH A LISTED GREEN SCREW THAT ACHIEVES CONTINUOUS METALLIC CONTACT WITH THE METAL ENCLOSURE.
2. NEUTRAL WIRES SHALL BE INSULATED AND MARKED WITH WHITE TAPE.
3. DRIVE 8' LONG GROUND RODS COMPLETELY BELOW GRADE IN #2 ROUTE BARE #2 WIRE FROM SERVICE SWITCH TO BELOW GRADE IN #2.

SERVICE GROUNDING DETAIL

SCALE: N.T.S.

entrex
communication services, inc.
1575 Eye Street, N.W. Suite 350
WASHINGTON, D.C. 20005
PHONE: (202)408-0960
FAX: (202)408-0961

1072.031

BLACKWATER
MD1785

3445 GOLDEN HILL RD.
CHURCH CREEK, MD 21622



7150 STANDARD DRIVE
HANOVER, MD 21076

NO.	DATE	REVISIONS	BY	CHK	APPD
1	07-17-08	CONSTRUCTION	NB	CG	CG
0	07-11-08	CONSTRUCTION	NB	CG	CG
A	06-17-08	CONSTRUCTION REVIEW	TMF	CG	CG
SCALE: AS SHOWN			DRAWN: N.B.		DESIGNED: C.C.

POWER DIAGRAM

JOB NO.	DRAWING NUMBER
	E08



7150 STANDARD DRIVE
HANOVER, MD 21076

1	1	07-17-08	CONSTRUCTION	NB	CG	CG
0	0	07-11-08	CONSTRUCTION	NB	CG	CG
1	0	D6-17-08	CONSTRUCTION REVIEW	TME	CG	CG
		NO. DATE	REVISIONS	BY	CHK	APP
		SCALE: AS SHOWN	DRAWN: N.B.		DESIGNED: C.G.	

DIPLEXER DETAILS	DRAWING NO.	E09
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Exhibit 10

FCC Environmental Assessment Checklist



The Environmental Navigators®

FCC ENVIRONMENTAL ASSESSMENT

Applicant: _____ FCC File No.: _____

The Spectrum and Competition Policy Division, Wireless Telecommunications Bureau sends “deficiency letters” to individual licensees and applicants, including tower owners, who have submitted environmental assessments (EAs) with applications (i.e., a filed FCC Form 601 or FCC Form 854) when the EA submitted is insufficient or lacks necessary documentation.

The following checklist is now used by the staff as an attachment to each deficiency letter to inform the licensee, applicant, or tower owner (collectively, “Applicant”) concerning compliance with 47 C.F.R. § 1.1307 of the Commission’s rules. In addition to compiling this information, Applicants are required to comply with all of the Commission’s environmental rules, including 47 C.F.R. § 1.1311 (i.e., “environmental information to be included in the environmental assessment (EA)”), to determine whether a proposed facility may have significant effect on the environment.

Pursuant to 47 C.F.R. § 1.1307, this EA provides insufficient information regarding the proposed facility’s compliance with the following NEPA requirements:

_____ **(a)(1) will be located in an officially designated wilderness area**

Applicant provided insufficient information for the Commission’s staff to determine whether the proposed facility satisfies § 1.1307(a)(1).

If the proposed facility would not be located in an officially designated wilderness area, provide an explanation of how the applicant determined that the proposed facility would not be located in an officially designated wilderness area. Applicant should cite specifically to the sections of the relevant databases, maps, references, or information from the relevant government agencies (e.g., Department of the Interior).

If the proposed facility would be located in an officially designated wilderness area, provide copies of all approvals, permits, or grants from the relevant government agencies approving the proposed antenna structure (e.g. Department of the Interior).

_____ **(a)(2) will be located in an officially designated wildlife preserve**

Applicant provided insufficient information for the Commission’s staff to determine whether the proposed facility satisfies § 1.1307(a)(2).

If the proposed facility would not be located in an officially designated wildlife preserve, provide an explanation of how the applicant determined that the proposed facility would not be located in an officially designated wildlife preserve. Applicant should cite specifically to the sections of the relevant databases, maps, references, or information from the relevant government agencies (e.g. Department of the Interior).

If the proposed facility would be located in an officially designated wildlife preserve, provide copies of all approvals, permits, or grants from the relevant government agencies approving the proposed antenna structure (e.g. Department of the Interior).

(a)(3) may affect listed threatened or endangered species or designated critical habitats; or is likely to jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(a)(3).¹

If no listed² or proposed³ threatened or endangered species or designated or proposed critical habitats⁴ are present in the county or counties where the "action area"⁵ is located: Explain the basis for the applicant's determination that there are no listed or proposed threatened or endangered species or designated or proposed critical habitats within the county (or counties) of the project's action area and that there would be no effect on listed or proposed threatened or endangered species or designated or proposed critical habitats within the county (or counties) of the project's action area. Provide the materials (with citations) that formed the basis for this determination (e.g., maps or lists from relevant U.S. Department of the Interior, Fish and Wildlife Service (FWS) databases). If the applicant received a letter from FWS indicating that there would be no effect, provide a copy of the FWS letter so indicating.

If listed or proposed threatened or endangered species or designated or proposed critical habitats *are present* in the county or counties where the "action area" is located and would not be affected by the proposed antenna structure: Explain how the applicant determined that there would be no effect on listed or proposed threatened or endangered species or designated or proposed critical habitats within the county (or counties) of the project's action area. Provide the materials (with citations) that formed the basis for this determination (e.g., maps or lists from relevant U.S. Department of the Interior, Fish and Wildlife Service (FWS) databases).

If the applicant received a letter from FWS indicating that there would be no effect, provide a copy of the FWS letter so indicating.

¹ Applicants who need to consult with the United States Fish & Wildlife Service regarding these matters should be aware that they are consulting with that agency pursuant to Section 7 of the Endangered Species Act. Furthermore, the applicant is pursuing such consultation as a "designated non-Federal entity." Additional, important information about this process may be found at: http://endangered.fws.gov/consultations/sec7_faq.html.

² "Listed species" are defined as any species of fish, wildlife or plant which has been determined to be endangered or threatened under section 4 of the Endangered Species Act.

³ "Proposed species" are defined as any species of fish, wildlife or plant that has been proposed in the Federal Register to be listed under section 4 of the Act.

⁴ "Critical habitat" is defined in Section 3 of the Endangered Species Act.

⁵ U.S. Fish & Wildlife Service defines an action area as "all areas to be affected, directly or indirectly, by the federal action and not merely the immediate area involved in the action." See 50 C.F.R. §402.02(d). For example, an action area would include the site of the proposed antenna structure, its immediate vicinity, and any roads to be constructed to the tower site.

If the applicant did not receive a letter from FWS indicating that there would be no effect, provide a copy of any informal biological assessment prepared by a biologist supporting the applicant's "no effect" determination. Provide the name(s) and qualifications of the biologist(s) who prepared the biological assessment along with any FWS staff who may be familiar with its contents.⁶

_____ **If the proposed antenna structure may affect, but is not likely to adversely affect, listed or proposed threatened or endangered species or designated or proposed critical habitats in the action area:** Provide a letter from FWS concurring with the applicant's informal biological assessment. If any measures are proposed to mitigate any effects on species or habitats, the assessment must outline those measures with FWS concurrence.

_____ **If the proposed antenna structure may affect, and is likely to adversely affect, listed or proposed threatened or endangered species or listed or proposed designated critical habitats in the action area:** Prepare a formal biological assessment as outlined in 50 C.F.R. § 402.01 *et seq.* The applicant should provide the formal biological assessment to the Federal Communications Commission for formal consultation with the FWS.

_____ **(a)(4) may affect districts, sites, buildings, structures or objects significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places**

_____ **For proposed facilities that would have no effect or no adverse effect on historic properties,** provide a letter from the relevant State Historic Preservation Officer (SHPO) to the applicant or its consultant regarding whether the proposed antenna structure may affect districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible, for listing, in the National Register of Historic Places (historic properties).

If you do not have a letter from the SHPO, provide documentation showing that the applicant complied with the Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission (NPA), 20 FCC Rcd 1073 (2004), *See* 47 C.F.R. §1.1307(a)(4), **Part 1 Appendix B.** *See also* <http://wireless.fcc.gov/siting/npa.html>.

If the proposed facility would come within an Exclusion under Section III of the NPA, provide a statement describing why the facility is excluded.

If the proposed facility would have no effect on historic properties, provide the date the Applicant filed its FCC Form 620 or FCC Form 621 with the SHPO, showing that the 30-day period outlined in Section VII.B.2. of the NPA has expired.

If the proposed facility would have no adverse effect on historic properties, provide the date the Applicant filed its FCC Form 620 or FCC Form 621

⁶ If available, provide information about post-high school formal education including degrees held, area(s) of expertise, years of experience, and membership in any relevant professional accreditation organizations.

with the SHPO, showing that the 30-day period outlined in Section VII of the NPA has expired. The Applicant should also document the date it submitted the FCC Form 620 or FCC Form 621 to the FCC for a 15-day review period (for material submitted electronically) or a 25-day review period (for material submitted by other means), pursuant to Section VII.C.2. of the NPA.

_____ **If the proposed facility would have an adverse effect on historic properties,** provide a copy of the Memorandum of Agreement (MOA) executed by the Applicant, the Federal Communications Commission, the SHPO, and the Advisory Council on Historic Preservation, if applicable, pursuant to Section VII. D.4. of the NPA.

_____ **For all proposed facilities,** in addition to the SHPO letter, other documentation of compliance with the NPA, or MOA, provide a copy of the Applicant's notification to potentially affected Indian tribes through the FCC Tower Construction Notification System (TCNS) or documentation of other reasonable and good faith efforts to identify and contact federally recognized Indian tribes and Native Hawaiian organizations, and a statement showing compliance with the procedures outlined in Clarification of Procedures for Participation of Federally-recognized Indian Tribes and Native Hawaiian Organizations Under the Nationwide Programmatic Agreement, *Declaratory Ruling*, FCC 05-176, released October 5, 2005. See <http://wireless.fcc.gov/siting/>.

_____ **(a)(5) may affect Indian religious sites**

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(a)(5).

Provide an explanation of how the applicant determined that the proposed facility would not affect Indian religious sites. Provide documentation of the applicant's good faith efforts to determine whether the proposed antenna structure may affect any Indian religious sites, including any archeological effects on Indian burial mounds. Attach copies of any letters or studies completed by archeologists for the proposed antenna structure. Include reference to any databases, maps, or other sources consulted to identify Indian Tribes whose religious sites might be affected. Attach copies of all correspondence the applicant or its consultant sent to or received from an Indian Tribe regarding the proposed antenna structure, other than correspondence that the Tribe has asked to maintain confidential.

The FCC recognizes that Indian Tribes, as domestic dependent nations, exercise inherent sovereign powers over their members and territory. Applicants consulting with tribal authorities are acting as delegates of the FCC, which has a government-to-government relationship with tribes. Tribal authorities may request FCC participation in consultation on any matter at any time. Any information regarding historic properties or religious or sacred sites to which an Indian Tribe attributes significance may be highly confidential, private, and sensitive, and applicants should respect the wishes of the Tribe with respect to the treatment of such information.

(a)(6) will be located in a floodplain

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(a)(6).

If the proposed facility would not be located in a flood plain, provide a copy of the section of the relevant map from the Federal Emergency Management Agency (FEMA) showing that the proposed antenna structure will not be located in a flood plain.

If the proposed facility would be located in a flood plain, provide a copy of the section of the relevant map from the Federal Emergency Management Agency (FEMA) showing the location of the proposed antenna structure. In addition, provide a copy of the building permit from the local jurisdiction where the proposed antenna structure will be located that shows the proposed structure is at least one foot above the flood plain. If the local jurisdiction does not issue building permits, provide independent verification that shows the proposed structure is at least one foot above the flood plain.

(a)(7) construction will involve significant change in surface features (e.g., wetland fill, deforestation or water diversion)

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(a)(7).

If the proposed facility would not be located in a wetland, provide a copy of the section of a map showing that the proposed antenna structure will not be located in a wetland.

If the proposed facility would be located in a wetland, provide a copy of the permit the applicant or its consultant received from the U.S. Army Corps of Engineers permitting the construction of the proposed antenna structure.

(a)(8) will be equipped with high intensity white lights which are to be located in residential neighborhoods, as defined by the applicable zoning law

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(a)(8).

Provide documentation that the proposed antenna structure will not be located in a residential neighborhood, as defined by the applicable zoning law (relevant only where high intensity white lights are required by the Federal Aviation Administration (FAA)).

(b) would cause human exposure to levels of radiofrequency radiation in excess of Commission-adopted guidelines

Applicant provided insufficient information for the Commission's staff to determine whether the proposed facility satisfies § 1.1307(b).